

TITLE 326 AIR POLLUTION CONTROL BOARD

FINDINGS AND DETERMINATION OF THE COMMISSIONER PURSUANT TO IC 13-14-9-7 AND SECOND NOTICE OF COMMENT PERIOD #99-93(APCB)

DEVELOPMENT OF AMENDMENTS TO RULES CONCERNING THE DEFINITION OF NONPHOTOCHEMICALLY REACTIVE HYDROCARBON OR NEGLIGIBLY PHOTOCHEMICALLY REACTIVE COMPOUNDS

PURPOSE OF NOTICE

The Indiana Department of Environmental Management (IDEM) has developed draft rule language for amendments to the definition of nonphotochemically reactive hydrocarbon or negligibly photochemically reactive compounds to incorporate by reference 40 CFR 51.100(s)(1), 62 FR 44900, and 63 FR 17331. The purpose of this notice is to seek public comment on the draft rule, including suggestions for specific language to be included in the rule. IDEM seeks comment on the affected citations listed and any other provisions of Title 326 that may be affected by this rulemaking.

CITATIONS AFFECTED: 326 IAC 1-2-48.

AUTHORITY: IC 13-14-8; IC 13-14-9-7; 13-17-3-4.

STATUTORY REQUIREMENTS

IC 13-14-9-7 recognizes that under certain circumstances it may be appropriate to reduce the number of public comment periods routinely provided. In cases where the commissioner determines that the rulemaking policy alternatives available to IDEM are so limited that the notice of first public comment period would provide no substantial benefit, IDEM may forego this comment period and proceed directly to the notice of second public comment period.

If the commissioner makes the determination of limited rulemaking policy alternatives required by IC 13-14-9-7, the commissioner shall prepare written findings and include them in the second notice of public comment period published in the Indiana Register. This document constitutes the commissioner's written findings pursuant to IC 13-14-9-7.

The statute provides for this shortened rulemaking process if the commissioner determines that "the rulemaking policy alternatives available to the department are so limited that the public notice and comment period under [IC 13-14-9-3] . . . would provide no substantial benefit to:

- (1) the environment; or
- (2) persons to be regulated or otherwise affected by the proposed rule".

BACKGROUND

Ozone is formed when photochemically reactive volatile organic compounds (VOCs) in the atmosphere are exposed to sunlight and hot temperatures. VOCs are emitted from automobiles, lawn equipment, manufacturing operations, printing companies, and a wide variety of other sources. Typically, ozone levels become elevated in larger metropolitan areas during the hottest days of summer. Although ozone cannot be seen or tasted, it can irritate the lungs and make breathing difficult. Children and people with respiratory problems are particularly susceptible to pulmonary distress brought on by elevated ozone levels.

The United States Environmental Protection Agency (U.S. EPA) will remove a compound from its definition of a volatile organic compound if it is determined to be equal or less than ethane in terms of photochemical reactivity. If a compound is determined to have only a negligible photochemical reactivity and therefore listed as a VOC-exempt compound, U.S. EPA will no longer enforce or give state implementation plan (SIP) credit for emissions reductions.

U.S. EPA has added several organic compounds to its list of negligibly photochemically reactive compounds at 40 CFR 51.100(s)(1) that are not reflected in the current state rule (326 IAC 1-2-48). The purpose of this rulemaking action is to be, and hereafter remain, consistent with amendments to federal rules by incorporating by reference 40 CFR 51.100(s)(1), which excludes the following compounds from regulation as photochemically reactive compounds:

1. **February 7, 1996 (61 FR 4588)**

perchloroethylene (tetrachloroethylene).

This revision to 40 CFR 51.100(s)(1) added perchloroethylene to the list of compounds excluded from the definition of VOC on the basis that it has negligible photochemical reactivity and therefore negligible contribution to ground level ozone formation. Perchloroethylene, also known as tetrachloroethylene, is not required to be controlled in order to prevent the formation of ground level ozone. Perchloroethylene is a solvent commonly used in dry cleaning and degreasing operations. Perchloroethylene will continue to be regulated as a hazardous air pollutant under Section 112 of the Clean Air Act. U.S. EPA has issued regulations limiting emissions of perchloroethylene from dry cleaning, halogenated solvent cleaning, and as a feedstock in the organic chemical manufacturing industry.

2. **October 8, 1996 (61 FR 52848)**

3,3-dichloro-1,1,1,2,2-pentafluoropropane (HCFC-225ca);
1,3-dichloro-1,1,2,2,3-pentafluoropropane (HCFC-225cb);
1,1,1,2,3,4,4,5,5,5-decafluoropentane (HFC 43-10mee).

This revision to 40 CFR 51.100(s)(1) added HCFC-225ca and cb and HFC 43-10mee to the list of compounds excluded from the definition of VOC on the basis that these compounds have negligible photochemical reactivity and therefore negligible contribution to ground level ozone formation. These compounds are solvents which could be used in electronics and precision cleaning.

3. **August 25, 1997 (62 FR 44900)**

difluoromethane (HFC-32);
ethylfluoride (HFC-161);
1,1,1,3,3,3-hexafluoropropane (HFC-236fa);
1,1,2,2,3-pentafluoropropane (HFC-245ca);
1,1,2,3,3-pentafluoropropane (HFC-245ea);
1,1,1,2,3-pentafluoropropane (HFC-245eb);
1,1,1,3,3-pentafluoropropane (HFC-245fa);
1,1,1,2,3,3-hexafluoropropane (HFC-236ea);
1,1,1,3,3-pentafluorobutane (HFC-365mfc);
chlorofluoromethane (HCFC-31);
1-chloro-1-fluoroethane (HCFC-151a);

1,2-dichloro-1,1,2-trifluoroethane (HCFC-123a);
1,1,1,2,2,3,3,4,4-nonafluoro-4-methoxy-butane (C₄F₉OCH₃);
2-(difluoromethoxymethyl)- 1,1,1,2,3,3,3-heptafluoropropane
(CF₃)₂CFCF₂OCH₃);
1-ethoxy-1,1,2,2,3,3,4,4,4-nonafluorobutane (C₄F₉OC₂H₅);
2-(ethoxydifluoromethyl)-1,1,1,2,3,3,3-heptafluoropropane
(CF₃)₂CFCF₂OC₂H₅).

This revision to 40 CFR 51.100 (s)(1) added 16 compounds to the list of compounds excluded from the definition of VOC on the basis that they have negligible photochemical reactivity and therefore negligible contribution to ground level ozone formation. These compounds are commonly used as refrigerants, aerosol propellants, fire extinguishants, blowing agents, and solvents.

4. **April 9, 1998 (63 FR 17331)**
methyl acetate

This revision to 40 CFR 51.100(s) added methyl acetate to the list of compounds excluded from the definition of VOC on the basis that this compound has negligible photochemical reactivity and therefore negligible contribution to the formation of ground level ozone. Methyl acetate is commonly used as a solvent in paints, inks, and adhesives.

IDEM realizes that there may be some drawbacks to a more widespread use of these compounds. The agency will work with industries to help them carefully consider other nonpolluting alternatives, if available.

After considering the potential benefits to air quality, IDEM has determined that this rulemaking has merit and proposes that these compounds be added to the list of nonphotochemically reactive hydrocarbon or negligibly photochemically reactive. IDEM is changing the format of this rule from a list of exempt compounds to a reference to the CFR, which the department updates every year. Since the list of compounds determined to have negligible photochemical reactivity are revised periodically by U.S. EPA, changing the format of our rule to reference the CFR is a more efficient approach as it cuts down the number of rulemakings and ensures that revisions get updated on a regular basis. This would be helpful to sources, as well as a more efficient use of our state rulemaking resources.

FINDINGS

The commissioner of IDEM has prepared written findings regarding rulemaking on incorporating by reference 40 CFR 51.100(s)(1), 62 FR 44900, and 63 FR 17331. These findings are prepared under IC 13-14-9-7 and are as follows:

- (1) This rule is an incorporation of federal requirements that are applicable to Indiana and it contains no amendments that have a substantive effect on the scope or intended application of the federal rule.
- (2) Once a cite is incorporated by reference, any changes during the year will be automatically updated by the department's annual update of the CFR.
- (3) This rulemaking amends Indiana's definition of nonphotochemically reactive hydrocarbon to be consistent with the federal definition of negligibly photochemically reactive compounds.
- (4) I have determined that under the specific circumstances pertaining to this rule, the rulemaking policy alternatives are so limited that the public notice and comment period provided in the notice

of first public comment period would provide no substantial benefit to the environment or to persons to be regulated or otherwise affected by the rule.

(5) The draft rule is hereby incorporated into these findings.

Lori F. Kaplan
Commissioner
Indiana Department of Environmental Management

REQUEST FOR PUBLIC COMMENTS

This notice requests the submission of comments on the draft rule language, including suggestions for specific revisions to language to be contained in the rule. Mailed comments should be addressed to:

#99-93(APCB) Definition of nonphotochemically reactive hydrocarbon or negligibly photochemically reactive compounds

Janet McCabe
Assistant Commissioner
Office of Air Management
Indiana Department of Environmental Management
P.O. Box 6015
Indianapolis, Indiana 46206-6015.

Hand delivered comments will be accepted by the receptionist on duty at the tenth floor reception desk, Office of Air Management, 100 North Senate Avenue, Indianapolis, Indiana, Monday through Friday, between 8:15 a.m. and 4:45 p.m.

Comments may be submitted by facsimile at the IDEM fax number: (317) 233-2342, Monday through Friday, between 8:15 a.m. and 4:45 p.m. Please confirm the timely receipt of faxed comments by calling the Rules Development Section at (317) 233-0430.

COMMENT PERIOD DEADLINE

Comments must be postmarked, hand delivered, or faxed by June 30, 1999.

Technical information regarding this action may be obtained from Pat Daniel, Program Planning and Policy Section of the Office of Air Management at (317) 233-0429 or (800) 451 6027, press 0, and ask for 3-0429 (in Indiana). Additional information regarding this action may be obtained from Kiran Verma, Rules Development Section, Office of Air Management, (317) 233-5678 or (800) 451-6027, press 0, and ask for 3-5678 (in Indiana).

DRAFT RULE

SECTION 1. 326 IAC 1-2-48 IS AMENDED TO READ AS FOLLOWS:

326 IAC 1-2-48 "Nonphotochemically reactive hydrocarbon" or "**negligibly photochemically reactive compounds**" definition

Authority: IC 13-14-8; IC 13-17-3-4

Affected: IC 13-12

Sec. 48. (a) "Nonphotochemically reactive hydrocarbon" means the following or "negligibly photochemically reactive compounds" refers to the list of organic compounds that have been determined to have negligible photochemical reactivity and thereby excluded from the definition of volatile organic compound (VOC) in 40 CFR 51.100(s)(1)*. The air pollution control board incorporates by reference 40 CFR 51.100(s)(1)*; 62 FR 44900* (August 25, 1997); and 63 FR 17331* (April 9, 1998).

- (1) Methane (Chemical Abstract Service (CAS) Number 74-82-8):
- (2) Ethane (CAS Number 74-84-0):
- (3) 1,1,1-trichloroethane (methyl chloroform) (CAS Number 71-55-6):
- (4) 1,1,1-trichloro-2,2,2-trifluoroethane (CFC-113) (CAS Number 76-13-1):
- (5) Trichlorofluoromethane (CFC-11) (CAS Number 75-69-4):
- (6) Dichlorodifluoromethane (CFC-12) (CAS Number 75-71-8):
- (7) Chlorodifluoromethane (CFC-22) (CAS Number 75-45-6):
- (8) Trifluoromethane (FC-23) (CAS Number 75-46-7):
- (9) 1,2-dichloro 1,1,2,2 tetrafluoroethane (CFC-114) (CAS Number 132-03-72):
- (10) Chloropentafluoroethane (CFC-115) (CAS Number 76-15-3):
- (11) 1,1,1-trifluoro 2,2-dichloroethane (HCFC-123) (CAS Number 306-83-2):
- (12) 1,1,1,2-tetrafluoroethane (HFC-134a) (CAS Number 811-97-2):
- (13) 1,1-dichloro 1-fluoroethane (HCFC-141b) (CAS Number 1717-00-6):
- (14) 1-chloro 1,1-difluoroethane (HCFC-142b) (CAS Number 75-68-3):
- (15) Methylene chloride (dichloromethane) (CAS Number 75-09-2):
- (16) 2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124) (CAS Number 2837-89-0):
- (17) Pentafluoroethane (HFC-125) (CAS Number 354-33-6):
- (18) 1,1,2,2-tetrafluoroethane (HFC-134) (CAS Number 359-35-3):
- (19) 1,1,1-trifluoroethane (HFC-143a) (CAS Number 420-46-2):
- (20) 1,1-difluoroethane (HFC-152a) (CAS Number 75-37-6):
- (21) Any perfluorocarbon compounds which fall into the following classes:
 - (A) Cyclic, branched, or linear, completely fluorinated alkanes:
 - (B) Cyclic, branched, or linear, completely fluorinated ethers with no unsaturations:
 - (C) Cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations:
 - (D) Sulfur containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine:
- (22) Parachlorobenzotrifluoride (PCBTF) (CAS Number 98-56-6):
- (23) Cyclic, branched, or linear completely methylated siloxanes:
- (24) Acetone (CAS Number 67-64-1):

(b) Compliance calculations for coatings expressed as pounds VOC/gallon coating (less water) should treat nonphotochemically reactive compounds **or negligibly photochemically reactive compounds** as water for purposes of calculating the less water portion of the coating composition.

***Copies of the Code of Federal Regulations (CFR) and Federal Register (FR) referenced in this section may be obtained from the Government Printing Office, Washington D.C. 20402 or are available for copying at the Indiana Department of Environmental Management, Office of Air Management, Indiana Government Center-North, 100 North Senate Avenue, Indianapolis, Indiana 46204.** (*Air Pollution Control Board; 326 IAC 1-2-48; filed Mar 10, 1988, 1:20 p.m.: 11 IR 2373; filed Sep 23, 1988, 11:59 a.m.: 12 IR 255; filed Jan 16, 1990, 4:00 p.m.: 13 IR 1016; filed Aug 9, 1993, 5:00 p.m.: 16 IR 2827; filed Sep 5, 1995, 12:00 p.m.: 19 IR 29; filed May 13, 1996, 5:00 p.m.: 19 IR 2855; errata filed Mar 21, 1997, 9:50 a.m.: 20 IR 2116*)

Notice of First Meeting/Hearing

Under IC 4-22-2-24, IC 13-14-8-1, IC 13-14-8-2 and IC 13-14-9, notice is hereby given that on September 1, 1999 at 1:00 p.m., at the Indiana Government Center-South, 402 West Washington Street, Conference Center Room A, Indianapolis, Indiana, the Air Pollution Control Board will hold a public hearing on amendments to 326 IAC 1-2-48 concerning the definition of nonphotochemically reactive hydrocarbon or negligibly photochemically reactive compounds.

The purpose of this hearing is to receive comments from the public prior to preliminary adoption of these rules by the board. All interested persons are invited and will be given reasonable opportunity to express their views concerning the proposed amendments. Oral statements will be heard, but for the accuracy of the record, all comments should be submitted in writing. Procedures to be followed at this hearing may be found in the April 1, 1996, Indiana Register, page 1710 (19 IR 1710).

Technical information regarding this action may be obtained from Pat Daniel, Program Planning and Policy Section, Office of Air Management, (317) 233-0429 or (800) 451-6027, press 0, and ask for 3-0429 (in Indiana). Additional information regarding this action may be obtained from Kiran Verma, Rules Development Section, Office of Air Management, (317) 233-5678 or (800) 451-6027, press 0, and ask for 3-5678 (in Indiana). If the date of this hearing is changed, it will be noticed in the Change of Notice section of the Indiana Register.

Individuals requiring reasonable accommodations for participation in this event should contact the Indiana Department of Environmental Management, Americans with Disabilities Act coordinator at:

*Attn: Sandie Meanor, ADA Coordinator
Indiana Department of Environmental Management
100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015*

or call (317) 233-1785. Speech and hearing impaired callers may contact the agency via the Indiana Relay Services at 1-800-743-3333. Please provide a minimum of 72 hours' notification.

Copies of these rules are now on file at the Office of Air Management, Indiana Department of Environmental Management, Indiana Government Center-North, 100 North Senate Avenue, Tenth Floor East, Indianapolis, Indiana and are open for public inspection.